

After Ceausescu's death in 1990 over 120,000 children were discovered living in grim institutions. In the county of Jud Bihor in Western Romania, children who had been assessed as 'mentally retarded' at the age of three were sent to an institution in the country village of Cadea. They were housed in old buildings that had broken windows and no heating or plumbing. It was dark and dirty and for the majority of the time the children were confined to their cots. Most of them were tied to the bars by strips of cloth tied tightly around their wrists and ankles.

The children were always dirty, hungry and cold - sixty to seventy died every winter. Their original 'retardation' was the result of early illnesses such as pneumonia and bronchitis, and years of confinement at Cadea only compounded the problem. When they were finally released in January 1991, many could neither walk nor speak. All of the children rocked backwards and forwards in their distress; their eyes were glazed and unseeing. On release, many of the children were sent to hospital buildings in the mountain villages of Remeti and Bratca. It is here that the White Cross started assisting the local Romanian staff in their care.

Since the White Cross has been working with the children, over 600 people have travelled with the Mission to Romania. Some have only been able to give a few days of concentrated work, most average two months and one stayed for four years! Some work with the children, others repair the buildings and yet others deliver goods. Every volunteer is special. They raise their own money for air and train fares, insurance, food and electricity and more than half of them do it all over again and go out for a second or even third time. Old or young, with or without qualifications, the combined work and presence of these many different people has had an amazing impact on the children.

Children with blank, unseeing eyes, rocking in a world of their own are now healthy, laughing and boisterous. The accumulative effect of the White Cross volunteers with their mixture of naivety and experience, their energy, their perseverance, their hopes, their dreams and their many different ways of showing love has created a rainbow effect of bouncy, confident and individual children.

Fundatia Crucea Alba has helped White Cross Mission with the legalities of purchasing small farms, employing assistants and moving children from the mental institutions in order to live a normal family village life. We intend that these farms will be the children's homes for as long as they need. All their lives if necessary.

Buying the farms is only the beginning of a lifetime commitment to those children we take out of State care. Without a regular financial safety net we would be irresponsible if we established too many homes. We do, however, believe that this is the only way forward and are desperate for substantial funding.

The White Cross Mission is a Charitable Trust Registered in England No 1021176

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ZX Format

Remembering the Sinclair ZX Spectrum

Games that broke the rules
Games that broke the joystick
Games to benchmark your PC by
The Forest Stop



MAIN MENU

10 HOME
20 ABOUT the Spectrum
30 DOWNLOAD " " "
40 GOTO other sites
50 LET pc = zx
60 CONTRIBUTE
70 READ a novel
K

GAMES TO BENCHMARK YOUR PC BY

As if waiting for the wretched things to LOAD wasn't bad enough, there were some games that treated your time as an endless commodity. Never mind your complicated diagnosis packages, if you want a real test of your PC's performance, try loading up The Hobbit on your emulator and see how fast it manages to colour Bilbo Baggins' carpet that lovely shade of purple. And to this day I still marvel at Psion Chess, a game that took an hour to make a move on level nine, even though Sinclair recommended leaving your Spectrum turned on for no more than 24 hours without letting it cool down!



And then there's Football manager, possibly one of the slowest, yet most addictive games in Spectrum history and written entirely in Spectrum BASIC.

And here at ZX Format we've managed to unearth exclusive unseen Football Manager material. Enjoy, if you will, scenes from **Football Manager: The Programmer's Cut**.



Psion Chess, shown here at actual speed.



The Fight: Arsenal suddenly 2 - 1 up against Villa, Keegan, in a moment of anger, gave a one fingered salute to Osman. Mayhem ensued. Five minutes later the crowd were on the pitch throwing cans of Lilt at each other.



The streaker: As if from nowhere and wearing nothing but a new romantic haircut, Gary Smith, 29, jumped onto the pitch to show his own brand of tackle to the fans watching this Southampton - Forest game.



The hand of God: Claiming divine intervention, Talbot popped this one into the back of the net with a swift piece of wrist action, putting Man United in the lead in a so far goalless match. An enquiry ensued.

Before ZXF: ZX Format was my website for "Remembering the ZX Spectrum." It became clear very quickly that no-one actually needed any help remembering. The logo was a play on the popular PC magazines of the time, in particular PC Advisor and PC Format.



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A BRIEF HISTORY OF ZXF

A brief look back over ten issues of ZXF. Hope you enjoyed them!

And so it's time for the blinds to be drawn in the ZXF office for the last time in a while. Everything's turned off and unplugged, the bins are empty, the mugs are washed and a note's been left out for the milkman.

Enough time for a quick retrospective? Oh go on then. There's still a few minutes' leccy in the meter, after all.

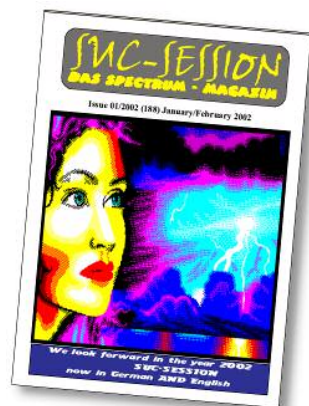
Where did it all begin? Well that was with 'ZX Format,' a little web site I knocked together out of an idea that it would be really cool to make a website almost entirely out of Spectrum graphics. Yeah well... things have got to start somewhere. The tag line for the site was "Remembering the ZX Spectrum." These were the days before I'd discovered **comp.sys.sinclair**, you understand. Oh I'd read about it - I knew it was out there somewhere, but I hadn't got my head around newsgroups back then and so I'd decided it had to be some sort of web site somewhere which everyone thought was really great, but no-one was prepared to actually link to it for fear of reprisal. Kind of a freemasonry sort of thing. Kind of... Of course once I finally worked the newsgroup thing out and found myself a darkened corner within **CSS** from which to lurk I soon realised there was no shortage of people already remembering the Spectrum.

My next idea was to build a Spectrum in a PC case after I saw something along these lines on **LCD's** site. Except that my machine, I decided, would be hooked up to microdrives, a 3 inch disk drive and a Plus D 3.5 inch drive. Oh yes. And this ultimate Spectrum would be

called a **ZX-Box**, which was of course an utterly hilarious play on the phrase **X-Box**.

Luckily for me I've never had much trouble accepting the notion that what I understand to be true about something might actually bear about as much resemblance to the truth as a 45 minute WMD claim, so recognising that I would have to do some pretty damn hefty research was all part of the project. The way I personally learn things best of all is to write about them - putting information down on paper forces me to look at the connections between facts and ideas, and the overall patterns apparent. So when I next encountered the first English language version of the German Speccy mag **Suc-Session** a few lights started to come on. Retiring to bed that night with my freshly printed copy I was struck by just how good it was to have something physical to read about the Speccy again. The time between that moment and the first issue of ZXF was just a few weeks...

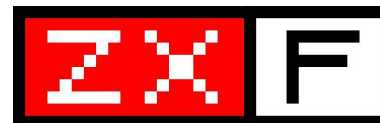
Since then ZXF has grown from 28 to 56 pages and the DTP file size for each issue has risen from under ten to over a hundred and fifty megabytes. The first issue was really quite a simple affair, a five page BASIC listing and a two page short story of mine occupying a large chunk of the magazine; images were small and boxy and the font was kept to Arial and Times New Roman throughout. The PDF conversion program I used then - PDF 995 - wasn't all that happy with embedded fonts at the time (although newer versions appear to handle this fine) and apostrophes, for some obscure



ABOVE: The first English language version of SUC-SESSION was something of an inspiration. Once downloaded you could print it out like a booklet. To say that this brought about some serious nostalgia is something of an understatement...

reason, appeared to cause it particular difficulty (mind you, why should a computer program be immune to the apostrophe abuse sweeping across the English writing world). This all changed with issue 4, when both DTP and PDF programs were updated and a whole load of new possibilities were opened up. To be honest, issue four could have been a lot better in its layout than it was - bits of it worked and bits of it didn't - but it was very much an experimental issue in that respect.

Cover design had been decidedly iffy up until issue 5, at which point I started putting a bit more time into their design. Issue 5's cover was of course a picture of the BT tower (and it would have



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If you enjoy ZXF and you want it to continue then consider yourself duty bound to let me know this (mailto:mail@cwoodcock.co.uk or by the feedback form). All other feedback will be gratefully received too.

ZXF has a voluntary purchase scheme. If you have downloaded and enjoyed an issue of ZXF, and if you are able to afford to, please consider paying £1 for your issue via the Paypal button on at the ZXF website ('magazine' page).

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SPECTRUM EMULATION ON THE GP32

Matthew Wilson takes us on a tour of handheld fun, ZX Spectrum style; courtesy of the GP32

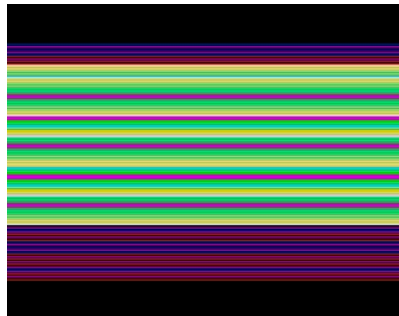
A while ago I picked up a GP32 – a relatively little-known hand-held console from Korea. There are development kits available for the GP32, it is capable of playing ports of games such as DOOM, and even recently had a release of MAME (until the author was forced to remove it temporarily for licensing reasons). There are also a number of emulators available for it. This article looks, for obvious reasons, at the current selection of Spectrum emulators.

For my testing, I chose a few familiar games (Manic Miner, Starquake) plus, on the advice of a few World Of Spectrum forum regulars, some additional programs to push the emulators hard:

- Aquaplane has an effect where the sea should extend into the border
- Cobra tests the emulation of the floating bus
- Overscan for multi-colour and border effects
- Fairlight, for 48K multi-channel beeper effects

GPSpeccy 0.06

Below: Overscan demo



GPSpeccy 0.06 seems to support SNA files only. Unfortunately it took me a while to notice this, although I suppose there was a clue in the directory from which it loads snapshots – GPMM\SNA. (It attempts, and fails, to load TAP files).

The keyboard selector (brought up with the left shoulder button) is an attractive photostyle view of the 48K keyboard complete with keywords, but it does take up the whole screen. I found the smaller views of ZXGP32 and fZX32 more convenient. The right shoulder button cycles through the available control options: Cursor, Kempston, Q/A/O/P/M, and Z/X/N/M/Space. I found Kempston support to be slightly unreliable – it doesn't seem to work in Aquaplane, for example.

The graphics in Cobra are flickery throughout, but the game still plays essentially correctly. There is no border effect on Aquaplane.

ZXGP32 Beta 3

This boots by default into the familiar 128K menu.

Left shoulder button brings up a pop-up keyboard, pushed down into the bottom-right corner of the screen (mostly in the border).

Start brings up the main

menu, allowing you to choose the Spectrum model (128 or 48K), Render Mode (FAST vs ULA).

Select brings up the file selector (capable of loading games from any directory). There is no ZIP support or auto-loading of tape files, so you'll have to use the keyboard to enter LOAD "" (in 48K mode) or the main menu (in 128K mode) to load your .TAP files once selected.



Above: GPSpeccy keyboard selector

Joystick support is for Kempston only.

Cobra is more flickery than normal but still plays a good game.

The border effect in Aquaplane is rendered perfectly when the Render mode is ULA. When the Render mode is FAST, there is no border effect. Changing the render mode did not make an obvious difference to the speed at which games actually played.

After this achievement, I loaded NMI3 with some hope, but sadly part 6 ("Splitty Overscan") displays "Unknown opcode – ED 65". The release notes do acknowledge that not all opcodes are implemented yet.



As most of you are already aware this is to be the last issue of ZXF for the time being. I've known for a while that it would be – there's just too much for me to do at the moment – and I wanted to go out with a great issue that left you wanting more. Well here it is: the biggest issue yet – 56 pages – with some of the best content so far.

It feels good to be ending on issue 10, pretty much bang on three years after the project started. It is my intention to return to it at some point in the future; I'm quite deliberately stopping now before it gets dull or annoying (I've had a great time putting this issue together) so that the desire will still be there once the time is. But I don't know when that will be.

So how successful has ZXF been? Well issue nine attracted well over a thousand downloads – and that's only counting the 'whole issue' downloads (ie, it doesn't include the part A/part B downloads available for making the printed version). It's received attention in **Micro Mart**, **Retro Gamer** and **Games TM**. It's been included on Retro Gamer's cover CD, incidentally, alongside my spin-off book, *The ZX Spectrum on Your PC* (which itself has been downloaded from WoS a staggering 2,500 times). Undoubtedly the thing that makes me most proud is the number of countries in which ZXF is being read – well over 20 at the last count.

Enough of the trumpet blowing; I have a serious proposal to make. One of the functions I have always worked hardest on with ZXF is its role as a news digest of events in the scene. There are other places you can get all this information from, but not as much in one place; I always hoped the magazine would be useful to any historians of the future wanting to document the aftermath of the Spectrum's heyday and its continuing life in 21st Century. If ZXF has been successful in this role then a gap now exists and I think this is an opportunity for someone to grasp.

But rather than just another magazine edited by another person in the community, what I think would be really great would be a publication affiliated with either WoS or with CSS that is overseen by a group of people and specifically edited by a different person each year. I'm kind of thinking the *Crap Games Competition* approach here, which has been extremely successful in sustaining this contest – now into its tenth year.

So **WoS Times**, for example, could be hosted via a couple of pages on WoS, where there could also be a form for uploading articles or news items. It could be discussed in its own forums at WoS Forums – perhaps one forum for public discussion and a private forum for the 'Development Committee' to talk in. People could volunteer to do a year's editing in the forums and when it's time to select one this could be done through a vote if there's more than one candidate. And so on. The specific rules would be up to the committee to decide.

Alternatively, **CSS Today** (or whatever you want to call it) could follow the CGC model more closely, being hosted each year from a different web site set up by the current editor. Discussion would, of course, be done using CSS. Personally I prefer the WoS model, since then the editor wouldn't have to spend time making a website as well as making a magazine. But I'm aware that this is making an assumption of WoS in terms of its desire to host something like this – which may not be a valid one at all.

Making the magazine more of a distributed project would also help correct some of the short-fallings of ZXF – most notably the lack of coverage for emulators on other platforms (Amiga, RISCOS, Linux, etc) and the very poor coverage of the demo scene. Being jointly 'owned' in this way might also encourage more people to write things for it.

I think it's an idea worth discussing at least and I'll be starting up a thread on WoS for this once this issue's been out a day or so. My hope is that timing of this way will channel your great sadness at the passing of ZXF into enthusiasm for a better replacement ;)

ZXF has been a great project to work on and I've enjoyed every aspect of it immensely. To all my contributors over the years I am extremely grateful and I cannot thank you – the reader – enough for sticking with this little 'zine and spreading the word afar.

Until next time.

Colin Woodcock
mail@woodcock.co.uk



itself, the Speccy can still continue talking to the AY chip at the normal 50Hz rate, so this trick doesn't suck up any more of the Spectrum's processing time than a normal wave would. You can only have one envelope running at any time, but you can have as many of the channels as you like following that envelope for their waveform.

To start playing around with envelopes, we need an ordinary sample with pure tone, no pitch bending or anything fancy like that. The shape or volume of the sample doesn't matter, because the envelope is going to override that. Our newly-created sample 5 will fit the bill. In our vacant slot in row 01 of channel C, enter this:

F-2 5C23

A bit jarring, no? What's going on here is actually quite involved, so let's take it slowly: On the one hand, you're playing an ordinary note at pitch F-2 - a square wave note, to be precise. On the other hand, you have the instruction 'C' on the right which tells it to ignore the shape of the sample and instead use the sawtooth pattern as indicated on our graph. The volume is rising and falling every 23 squillionths of a second (the exact definition of a squillionth is unimportant to us) - this effectively slices up the note into very short pulses. I just plucked the number 23 out of the air, so inevitably the points at which the note is sliced up will fail to match up with the highs and lows of the square wave, and as a result we get a horrible farty noise. Got that? Good. Hopefully you won't be put off when I tell you that the number 23 is actually in hex.

Since we are, after all, exploiting an unintended quirk of the AY chip, we don't have the luxury of working with musical note names here, or even any guarantee that we can perfectly match up the envelope speed with our desired note. It all has to be done through trial and error. So, take that number 23 and gradually increment it through 24, 25... 29, 2A, 2B... you'll find that the tone goes down until you reach 2D, where it settles in tune with the F-2 note. It's not very bass-like though - it could do with being an octave lower, and to do that we need to double the number. I'm not very good at mental arithmetic in hexadecimal, so I'll just say that it's fifty-something and fiddle around with different values until we arrive at 59. There's an endless variety of ways you

can tweak the final sound - using F-1 instead of F-2 will give a deeper note, and putting 3C as the envelope speed (a number half way between the two 'sensible' values we identified) will produce some gritty harmonics. Here we'll build our bass riff by alternating between envelopes C and A - the latter is a bit mellower due to the smoother waveform. Cramming our remaining notes into the gaps in channel C, this is how it works out:

01 F-2 5C59

03 F-2 5A59

04 F-2 5C59

07 F-2 5C59

09 F-2 5A59

10 F-2 5C59

Now, after that string of Fs, we get a bit in G sharp followed by a bit in C. As a quick test, see if you can figure out some sensible envelope values to use in those keys. While you're doing that, allow me to go off on a brief diversion.

One thing I haven't covered up to now is the transposition capabilities of Soundtracker. This comes in two forms: firstly, there's the 'Transposition' option lurking under 'other', which presents you with a cheap-and-cheerful interface for shifting a section of a pattern up or down a prescribed number of semitones, looking rather like the 'Move Text' feature. Secondly, when you're working with positions, and placing a pattern at a certain position in the song, you can fiddle with the 'height' slider to get the entire pattern shifted up or down, and instantly create your own Eurovision-style cheesy key changes.

Unfortunately, these features aren't what they've cracked up to be, due to what we've just learned about envelopes. Soundtracker can transpose the actual notes, but there's no way to automatically adjust the envelope speeds to match new notes. Consequently, the 'height' slider is almost no use at all (except for those rare occasions when you choose not to use envelopes anywhere), and the 'Transposition' button will only help if you're prepared to go through the transposed data afterwards, fixing up any envelope-based notes that have been trashed in the process.

Enough of that though - back to our bassline.

BAFTA AWARD TO TEXT ADVENTURE

>[BBC remake of HHGTTG game celebrated at www.bbc.co.uk/radio4/hitchhikers/game.shtml](http://www.bbc.co.uk/radio4/hitchhikers/game.shtml)

Fans of the late Douglas Adams' classic *Hitchhiker's Guide to the Galaxy* books will no doubt be aware that the text adventure of the same name is a rather special piece of work because it was written by Douglas himself. Written in 1984 using the Infocom system, the game didn't make it to the Spectrum until the +3 came along.

2005 is a bit of a milestone year for Hitchhikers fans because the film version - a project in the pipeline for so many years - is finally due out this spring (and will probably be playing by the time you read this). Initial reviews at this stage look very disappointing, unfortunately.

But it's not all bad news: at the same time that the film opens, **BBC Radio 4** will be airing the fourth and final radio series following last autumn's much-anticipated 'Tertiary Phase' third series which re-united many of the cast of the original series (first aired 1978 - 1980). At

the time of The Tertiary Phase's recording the BBC decided to celebrate by re-making the original text adventure - then 20 years old - for its online audience. The actual text remained the same, of course, but a new interface and graphics were added.

Drafted in to update the game were **Rod Lord** creator of the Guide's wonderful graphics in the 1980s TV version of the story and **Sean Sollé** from Douglas' own company **The Digital Village**. The game has been an immense success for the Radio 4 website and was honoured in March with an **Interactive BAFTA** award.

Now the game has been developed even further; following BBC Online's request for visitors to design new graphics for locations and objects without pictures, the artwork of **Nolan Worthington** and **Andrew Wyld** have been added in to create two new editions. Proof if proof were needed then that great games don't die.



The brand new, BAFTA winning BBC remake of the classic DNA text adventure, alongside the Spectrum +3 version.



SOUNDTRACKER

Matthew Westcott contemplates himself for the role as the tenth Doctor whilst he completes the third and final installment of his Soundtracker tutorial.

Well, what do you know? One minute we're beaver away on a Spectrum rendition of the Doctor Who theme, and before you know it the Beeb are rewarding us with a brand new series. Time for us return the favour by dressing up our soundtrack with special effects that would do the BBC Radiophonic Workshop proud. Load up the track at the point we left off last time, and we'll get cracking.

Ornaments

Head for the 'Orn.Edit' button, and choose ornament number 1. You're presented with an interface that looks rather like the second page of the sample editor, and there's a good reason for that - it does pretty much the same thing, varying pitch over the duration of a note. There are two differences: firstly, with ornaments you have more control over the musical scale because you're adjusting the note up and down by complete semitones, rather than those hazy indefinable wave periods (although this does mean that you can't use them for pitch shifts and whatnot, because they rely on adjustments finer than a complete semitone). Secondly, they're separate from samples and therefore one ornament can be applied to any sample you like, even one that's already got some pitch shifting built in.

Ornaments are just the ticket for inserting grace

notes and twiddly bits into your music - these are things which are referred to as 'ornaments' in traditional music, after all - but the most popular use of them is to generate fake chords that rapidly cycle between notes so that they blend together (hopefully) and simulate more voices than the three channels you're limited to. Figure 3.1 illustrates the concept - we alternate between +00 (the base note), +07 (an interval of a fifth above the base note), and +12 (an octave above). As usual, press 0 to listen to the result - a nice fat power chord.

Notice that we hold each note for two frames before moving on to the next - this happens to sound better than simply alternating between +00, +07, +12. If you do that, the notes are played so quickly that they lose their musical quality, and come out as a rather unpleasant 'warble'. Try it out if you don't believe me. Actually, try it out even if you do believe me.

In most of my compositions I find that the quota of 15 ornaments gets used up very quickly, with major and minor chords turned around every which way, but as it happens we can get by with just the one in this case. We need a sample to

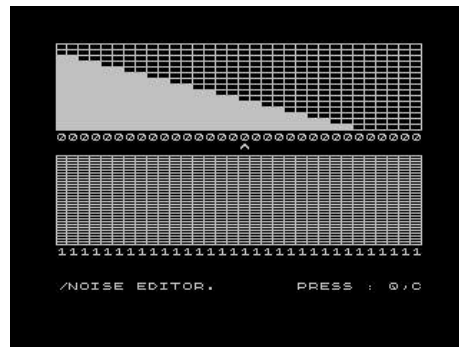


Figure 3.2

overlay our ornament onto, so edit sample number 5 to look like figure 3.2 - leave all the pitch values at +0000. Nothing new here - just a pure note that's a bit quieter than sample 1, so that we



Figure 3.1

personal inspirations.

And then we meet **The ZX Spectrum Orchestra**, described by the artists involved as "basically an orchestra of Spectrums." This fascinating segment introduces us to **Mike Johnston** and **Brian Duffy** two members of the group who are now co-ordinating whole groups of the machines musically in front of live audiences - a process described as being akin to "having a gang of naughty schoolchildren on the stage" (a quite wonderful comparison, I think, given the schoolboy heritage of the Speccy). Apparently the project all started when Brian bought a Spectrum manual out of curiosity at a car boot sale and read about the 'BEEP' command - and wondered if it was possible to create music with it... The live setup involves attempting to 'conduct' different Spectrums - each with a different function. One is a dedicated **Currah MicroSpeech** unit, for example; another runs the Wham Drum Machine. I can't even begin to imagine how hard that must be.

There's lots to be read about The ZX Spectrum Orchestra, incidentally, over at www.redkeyreddoor.com, including an interview with the group and reviews of their live gig in January by both Gasman himself and band member Mike Johnston (check out www.redkeyreddoor.com/index.php?p=48 for an overview of all articles and links). Their official home on the net is to be found at www.warmcircuit.com/webn/artist.php?artist_id=2, where you can learn about their upcoming commercial releases, including a CD EP which apparently has already sold out. Finally, the group have produced a music video called **Look and Listen** (programmed by Mike Johnston) which can be downloaded from www.7inch.org.uk/About_7inch/Film_of_the_month.aspx AY Riders it ain't, but with the right company



and larger it should give rise to some interesting conversations!

On the subject of the **AY Riders**, the AY chiptune champions have recently released a new CD at <http://8bitpeoples.com> which can be yours for the tiny price of \$7 US (you can also listen to the tracks online, as well as downloading the cover art). **ZX Spectrum is Alive** is the follow-up to their third album **8 Bits Is Enough** and features tracks by Yerzmyey, X-Agon, Factor6, and Gasman.

Gasman, of course, is currently a ZXF guest columnist; you can check out the final part of his Soundtracker tutorial in this very issue, where the final touches are being put on his rendition of the Doctor Who theme. And so the music continues. As Sharopolis concludes so eloquently in his radio programme, "23 years on enthusiasts are still keeping the Spectrum beeping." Long may it be so.



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	ZX Spectrum - 16K	3002	99.95	
	Postage and packing: orders under £90	0028	2.95	
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	G10/R Chess	5301	14.95	

Section C: Cassette Programs for ZX Spectrum

Qty	Item	Code	Item Price	Total
	EB/S Chess Tutor 1	4308	9.95	
	E7/S Musicmaster	4306	9.95	
	EB/S Beyond BASIC	4307	9.95	
	EB/S Make-a-Chip	4305	9.95	
	LS/S Print Utilities	4404	9.95	
	TOTAL £			

ZX Microdrive information
Please add my name to the Microdrive Mailing List, and send me a colour of ZX Microdrive/Interface 1. (tick New). You can use the above form to let

ROSETTA STONE

It was the order forms on a handful of Sinclair's "Sinclair Special" leaflets (found on WoS) which finally explained the alternate spine coding system introduced towards the end of the Sinclair branded range. It turns out that the codes had been used for some time already as order codes before they were introduced to inlay spines.

with 2000. Even postage and packing costs got their own codes under this system (0028 for orders under £90 and 0029 for orders over £90). Returning to Spectrum software in particular, Games had the range 4000 to 4200, Education had the range 4300 to 4399, Languages had the range 4400 to 4499, Personal had the range 4500 to 4599 (although only one title was ever produced in this range)

and Business had the range 4600 upwards. ROM cartridges were coded 5300 to 5309.

And the 'even bigger mystery'? Study the complete list on the opposite page and you'll discover a gap between 4036 (*Match Point*) and 4038 (*Panama Joe*). No known title is known to exist with the code 4037. This could be just an error of the same type that

saw the Silver label Jetpac incorrectly coded G27/R. Or perhaps a release was scheduled for this number but got delayed or pulled out for some reason. But maybe - just maybe - there's a mystery title out there that we don't yet know about. It's only a little mystery, but it's a mystery nonetheless and I'm delighted by it. After all, what is a community without its little mysteries?

CSSCGC TURNS TEN

>Tenth anniversary of Cassette 50 tribute

How's this for a truly staggering fact: for ten years now we've been hammering away at the rubber keyboards to produce the worst games conceivable, all out of love and recognition for the world's worst ever computer games compilation, the Cascade Cassette 50. How many of us would have thought back then, as we cursed the seductive allure of the free digital watch and sobbed over our £9.95 forever lost to the clutches of Mr Cascade, that one day we would come to look upon that little blue and yellow box with something limping its way towards affection?

The 2005 comp.sys.sinclair Crap Games Competition, then, is being hosted by CSS regular decay and already the entries are arriving. Top of the list is last year's winner Paul Equinox Collins with his new version of Space Invaders, 'Invade-o-Trons from Planet Q'. Paul claims on the opening screen that he sincerely believes Invade-o-Trons "to be the worst Space Invaders game ever written"; ZXF can report this perception to be a highly accurate one.

In a break with well-established tradition the competition this year has got its act together before the summer solstice and actually aims to complete the submission process by the end of the year, so if you'd like to make a submission to the competition you have until December 31st to put your entry together. Entries can be made as .z80, .sna, .tap and .tfx files for Spectrum games, .p files for ZX81 games, and .o files for ZX80 games.

Hopefully this year's competition will see a return to using judges after recent attempts to introduce democracy to the judging process resulted in such scandals as awarding first place to actually good games masquerading as bad ones (2003) and awarding first place to the first game on the drop down list by just clicking on the 'vote' button (2004). There are rumours that Matthew Lewis, one of the original Cassette 50 authors, is up for doing duty as a celebrity judge. A good punishment, if overdue... www.lofi-gaming.org.uk/speccy/cgc2005/

CRASH TALK

>Dominic Handy interviewed

Matthew Wilson, maintainer of **CRASH - The Online Edition** (<http://crashonline.org.uk>) has managed to pin down ex-editor **Dominic Handy** for an interview.

Handy, who edited CRASH from issue 55 to issue 62, reveals some fascinating insider information in the interview, including how - in the days before editorship - he was employed for reviews he didn't write and how his face was used for a reviewer who didn't exist! Perhaps the most scandalous revelation is confirmation that the never released **Rainbow Arts** game **The Great Giana Sisters** only got its CRASH SMASH because it was featured on the cover of issue 55. According to Handy, Rainbow Arts owners **US Gold** were so desperate for a hit they managed to persuade him to get CRASH resident artist **Oliver Frey** to design a cover based around the game before a review copy made its way to Ludlow. When they finally

did get a copy the game was rubbish, but "we didn't have much choice than give it a CRASH Smash as we'd put it on the cover." Tch. Eh?

You can read more at <http://crashonline.org.uk/99/handy.htm>

ZX CLUB

>Gaming like it used to be

If there's a problem with the modern Spectrum scene, it's that there is too much choice when it comes to playing games. With thousands of titles to choose from at WoS, few of them ever get played at anything like the depth that they used to when your next eight bit purchase was at least a few paper rounds away.

Such is the rationale behind the **ZX Club**, a club set up to encourage players to spend a little time getting to know a game. Operating from a small site at <http://mysite.wanadoo-members.co.uk/zxclub> the club members also use WoS Forums as

their primary medium for discussion: a new game is chosen each week by the members and discussed as play progresses.

It's a neat idea and the club appears a well-organised affair. Games played so far include Booty, Uridium and Rogue Trooper. Visit the site for more details.

PGD IS GO!

>Cronosoft designer released

Reviewed last issue, **Cronosoft's Platform Games Designer** by **Jonathan Caldwell** took a while to make it to the virtual shopfront at www.cronosoft.co.uk, but in the last couple of weeks (at the time of writing) it finally made it there and judging by the initial response it seems to have gone down a storm. Deservedly so. The full package includes both the Linear Designer and the Explorer Designer as well as a sample game and costs £4.99 for a DVD-cased cassette or £3.49 for an emulator file. Get coding.



UNLOCKING THE SINCLAIR CODE

Whilst I take a break from editing ZXF one of my new projects will be researching the Sinclair brand range of software for the Spectrum. The first piece of work undertaken has been examining the code system used by Sinclair to identify individual titles.

There's just something about the Sinclair brand. I love it. The vivid, often action-packed inlay designs have something of a Boys' Own quality about them and could hardly contrast more with the stark, basic, often BASIC contents held by the C15 within; yet I never feel betrayed by Sinclair Research packaging. It's almost as though the assumption is implicit that the onus is on me - the player - to turn chunky, spartan graphics or a very minimalist description of a desert island/alien planet into something much more exciting. System requirements: imagination. Perhaps it's just me, but it feels like there's something very British about all that.

Before the Spectrum came along the Sinclair Research software brand was already well established, of course, with plenty of titles for the ZX81 (requiring presumably even more imagination). The codes used on the spines of cassette inlays comprised a single letter to denote the genre of the software - G for games, E for education, L for languages and B for business - followed by a number. G1 was *Super Programs 1*, E1 was *English Literature 1* and so on. For Spectrum software the same coding system was used initially, the addition of an S (for Spectrum) suffixed to distinguish these from ZX81 titles. So G1/S was *Games 1* and E1/S was *History 1*. The Spectrum titles weren't completely distinct from those in the ZX81 range, however; quite a few titles appeared in both ranges (Chess, Backgammon, Space Raiders, etc) and in some cases it was clear

very little had been done to the code in its conversion to take advantage of the Spectrum's additional capabilities (perhaps most apparent for Adventures A to D, which I'm willing to wager would look identical running on a ZX81 and Spectrum side by side). Many of the ZX81 inlay designs were also re-used in the early days of the Spectrum range.

Of course the purpose of the Sinclair Research range was to provide a wide selection of games and utilities to entice the potential Spectrum buyer in the days before a mass market existed for Sir Clive's little machine. As we know now, it didn't take too long for that market to become established, but it's a fair bet that at the time the certainty of this outcome was an unknown variable and Sinclair didn't want would-be Spectrum owners turning away due to a lack of software available for the machine. As the market got on its feet Sinclair continued to support its machine though new releases, but the range was eventually brought to an end late 1984/early 1985; possibly the financial difficulties Sinclair was in by this stage played a role in this or perhaps it was just felt that the range no longer served a purpose. The *Software and Peripherals Catalogue* shipped with every Spectrum+ 128 in 1986 did not contain a single piece of software from the Sinclair Research range.

In 1984 Sinclair made a change to its brand design, introducing the silver label inlay style now achieving a fame of sorts through the trading of these titles on ebay.

From the serious collector's point of view these are amongst the more hard-to-find titles within the range and they rarely sell for less than a fiver. The first of the games range to carry this design was *Bubble Buster* (G32/S) if we go by chronological release, although if we were to go by spine code alone it would appear to be *Jet Pac*.

Jet Pac, *Pssst*, *Tranz Am* and *Cookie* were, of course, the four games by **Ultimate** to be released under the Sinclair label as ROM cartridges for the ill-fated *Sinclair Interface 2*, alongside **Psion** titles *Space Raiders*, *Chess*, *Planetoids*, *Hungry Horace*, *Backgammon* and *Horace & the Spiders*. Each one of these ten titles had been released previously in cassette version (perhaps the fatal flaw in Sinclair's marketing of this device), but the four Ultimate titles had never been released as *Sinclair* cassettes. To distinguish the Psion cartridge titles from their existing (identical) cassette versions the R (for ROM) suffix was adopted in spine codes, making the Chess cartridge, for example, G10/R as opposed to G10/S. But for the Ultimate titles there were no existing numbers to add an R to so they were just given the next four numbers available in the Spectrum sequence at that time - G27 to G30. For a while, therefore, the games sequence went from G26/S (*Flippit*) to G27/R (*Jet Pac*) through to G30/R (*Cookie*) and then to G31/S (*Chequered Flag*) - ie, from cassette to ROM cartridge and back to cassette again. But then, some time later, the four Ultimate titles were also added in - retrospectively - to the cassette range as G27/S to G30/S (although

means that several games (some from Atlantis Software) were removed from our website. Retro-trader (<http://www.retrotrader.com/>) also assures that more games will become denied, so let's wait and see what they are up to!

In the midst of all this there is at least one good example of how we in the community might imagine old software might be put to use - the publishers of **Fighting Fantasy** books (such as *Warlock of Firetop Mountain*) - recently re-published and to be supplemented by new titles (boy does that take me back) - have actually suggested on their website (fightingfantasygamebooks.com) that readers download Spectrum versions of *Warlock of Firetop Mountain* and *Forest of Doom* to play for free. The positivity towards the Fighting Fantasy books coming out of the thread on WoS where this was discussed is a marked contrast to the negativity towards Paul McKenna following his intervention and underlines the point made by several posters in the latter thread that Mr McKenna has done himself no favours by taking the approach that he has. After all, his aim with the games in question is to develop versions for mobile phones. Perhaps he thinks the Spectrum community can't possibly have an influence on the wider audience he is hoping exists for this product, but this is not the sort of risk that astute business people tend to take. **Retro Gamer** last year positively bent over backwards to try to keep the various retro gaming communities happy, seeing this population as one of their core audiences. If Mr McKenna is unaware of the size of this community then he clearly has not researched a market he is hoping to enter.

At the same time it's up to us to keep our tone moderate and friendly, and to recognise - as in the Retro-Soft example - that sometimes the good of the Spectrum outweighs the removal

of less than 0.1% of the current archive. In our dealings with the software houses today which own the intellectual copyright to the titles we would like to be able to distribute it's up to us also to remember that the people we communicate with potentially have little or no knowledge of the Spectrum, of Spectrum games or of the modern Spectrum scene; at the same time they're probably trying to juggle 101 other jobs they're supposed to be delivering on and granting 'distribution permission' (whatever that means - they're probably unclear on that without legal advice) for a bunch of old games is probably nowhere near the top of their to-do list unless they're in serious work-avoidance mode. And if they're in any doubt as to the legal issues involved - which most of them probably will be - it will no doubt seem a much more attractive option to err on the side of caution and say 'no' than say 'yes' and later find out that they're in trouble with the boss for doing this.

If anything, it's amazing that so many companies have granted distribution permission given this; the lesson for us all - especially for Gamestage - is that this is likely to have been a success brought about by diplomacy more than anything else. Empathy is key. If we can successfully communicate that we understand the situation our contact is in - as opposed to just trying to convince them to do what we want them to - then the odds will be the best that they can be in our favour.

+D MOVE

>Small update

Rudy Biesma has contacted ZXF to let us know that his Disciple and +D disassemblies have been moved to a new website.

The new address is:
www.biehold.nl/rudy

SWEDISH TREASURE

>Missing ROM discovered

Self-confessed Commodore aficionado **Niklas Ramsberg** has stumbled across a very rare Spectrum at his local fleamarket - a Swedish version of the rubber keyed model by **Beckman Innovation**. The hardware is no different from an English Speccy, but its 16K ROM has for some time been listed as Missing In Action.

You can try out new ROMs in many modern emulators. In SPIN, for example, you can select a specific ROM from the Hardware tab on the Options box. Drop the ROM file into SPIN's folder and select it from SPIN for either the 48K or the 48K+.

The ROM gives a rather colourful reset and boots with a different copyright message than the standard 48K Spectrum. All error messages are in Swedish and the extra characters are available in extended mode with shift and S, D, F, G, Y and U.



Unsurprisingly, ROM fan Geoff Wearmouth was quick to leap upon the new file and pick it apart for secrets. It appears that the ROM is actually a little more clever than just a translation of error messages: many of the original 16K ROM's bugs (highlighted by Dr Ian Logan in *Understanding your Spectrum*) have been fixed in this file. So far Geoff has worked this out by running routines designed to force the errors that would normally be found; now he's going to work out how they did it.

restore

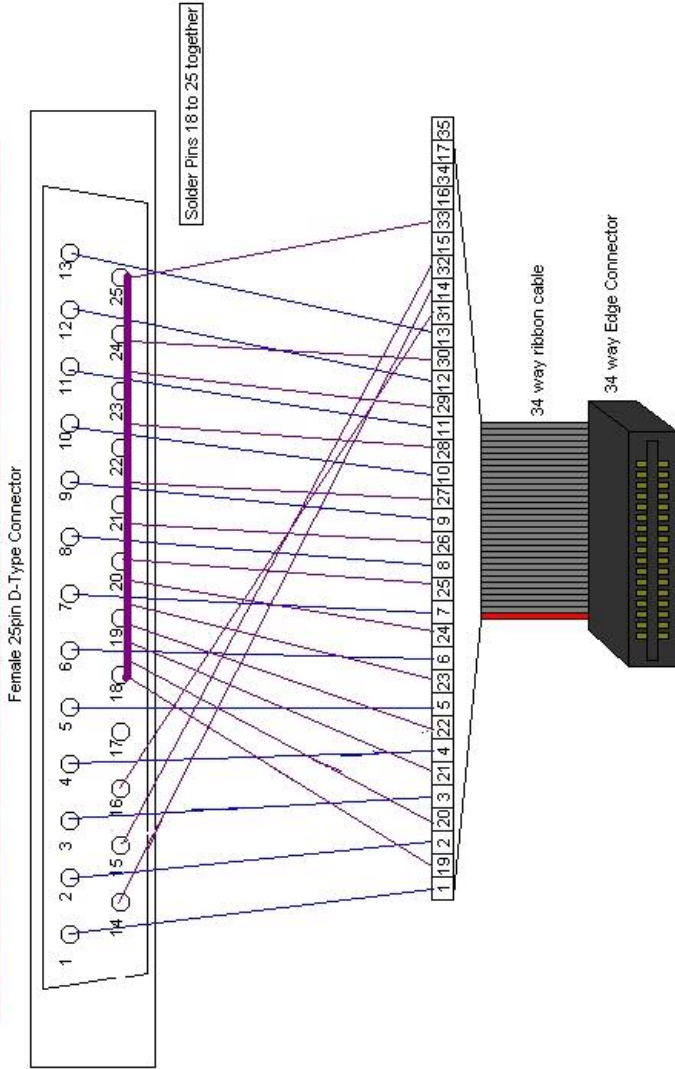
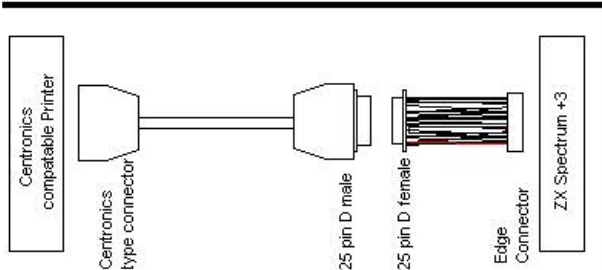


INSPIRED BY RUBBER KEYS

This +2B valiantly gave up a couple of its original keys for a +3 I stumbled across at a car boot sale two years ago. A perfectly good computer, I was reluctant to just leave it like that, particularly when I had a mucky old +2 under the bed with some sort of cassette mechanism problems. This is the solution I came up with. At first I plugged in all the grey keys of the +2, but that just didn't look right. Swapping back in all the large black keys seems to do the trick.



printerface
zx spectrum printerface





My own main contribution to ZX Spectrum software is a couple of text adventure games written using Gilsoft's wonderful Professional Adventure Writer (PAW). As demonstrated by the enduring popularity of Douglas Adams' *Hitchiker's Guide to the Galaxy* (see **new**), a well-written text adventure can stand the test of time as a work of contemporary art, if you will, all by itself. It doesn't need to concern itself with all the bells and whistles we seem so obsessed with these days if the writing is good enough.

There are lots of IF (Interactive Fiction) authoring systems out there, but for those of us who know and love the PAW way of doing things, a Windows program that adopted this approach would have to be a gift from above, right? The good news is that not only does just such a program exist, but its already been through several revisions **and** can import Spectrum PAW (or QUILL) adventures. It's called **WinPAW**. ZXF has been asking its creator, **Douglas Harter** some questions.

PAW obviously made an impression on you when it came out. Were you a Spectrum user at the time? If so, were you previously a Quill devotee?

Actually I was a Timex/Sinclair user. I was getting a couple UK magazines and saw an ad for the Quill, so I got that first. Then when the PAW came out I ordered it also.

Before starting work on WinPAW, had you written any PAW or Quill games yourself?

I have one game which I have been working on for years, but have never completed it.

When did you come up with the idea for WinPAW; what inspired it?

February 2001. It was inspired by a program out at the time called WinQuill, a Windows version of Quill. WinQuill stopped being supported about a year after I started working on WinPAW. He even lost the source.

Was the ability to import a Spectrum snapshot (of a PAWed/Quilled game) always a planned feature or has the main function of WinPAW always been to encourage the development of new Interactive Fiction?

The main function was to encourage the development of new Interactive Fiction. However, I added imports early in the development because I needed working games to test the program.

WinPAW communicates with unPaws and UnQuill to achieve the

import facility; did you have to work with any of the authors responsible for these tools in order to manage this?

Yes, I worked with both John Elliott (UnQuill) and Alexander Katz (UnPaws) when testing. I found several bugs in both programs which they corrected for me. Both have been very helpful.

Have you ever met or communicated with either of the original PAW authors (Tim Gilbert and Graeme Yeandle) during the development of WinPAW?

Never talked to Tim. I couldn't find a way to get in touch with him. I have talked to Graeme several times. He has helped me with several code sections. I live in the USA and have never gone to the UK, so never met any of my UK users or contacts.

What has the response to WinPAW been? Is it being used within the IF community?

I really have no idea. I only know that I have 70 registered Users. I have never heard of WinPAW games. None of my users has indicated that they have written any. I do have one user who was working on one, but he now has gotten away from text adventuring. He did a good bit of testing for me on WinPaw.

The current version of WinPAW being worked on is version 6; how has the program evolved over six versions?

Version 1 was the PAW up thru

Version A16.
Version 2 added some exports in UnPaws and PC Paw formats.

Version 3 added a couple new Actions and HTML-like tags.

Version 4 added PAW Character set and graphics. I have to give Alexander Katz credit for helping me with this change. He provided me with a lot of info on how the machine code in PAW handled them.

Version 5 added being able to play Quill games. Also added was being able to use character set and graphics or not.

The main feature in Version 6 is being able to use duplicate words (use water as both a verb and noun). This was a feature of a non-spectrum version of PAW and was requested by a user. This required support for the Adventure Creation Environment (ACE), another version of PAW which was based upon that non-spectrum version.

Within the modern IF community, which are the main 'rivals' to WinPAW for developing Interactive Fiction and how do they differ from WinPAW?

Well, ACE will be a rival to PAW as soon as it is released, which should be shortly. I uses strictly text input, similar to PC Paw, another rival. There are several other major IF development packages. They are all text based (text is entered using an editor, the package compiles it using the compiler and it is then



50,000 + Wholesale Brand New, Retro Software Titles

Winning bid: £3,600
Number of bids: 29
Ended: 06-Mar-05

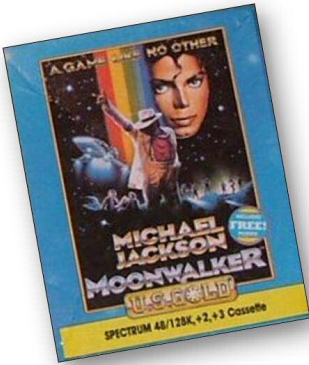
This, apparently, is what 50,000 unsold retro titles looks like, covering the formats Sinclair, Commodore, Amstrad and more. Starting at 99p this auction soared up to over three and a half grand in nine days. Presumably the buyer will break the lot down and start selling off the titles individually; the question is will he make a profit? By our calculations he's paid 7.2p per title so far, so things look hopeful. More details in Retro Gamer 15.



Michael Jackson Moonwalker 1989 Spectrum computer game

Starting bid: £15
Number of bids: 1
Ended: 16-Jan-05

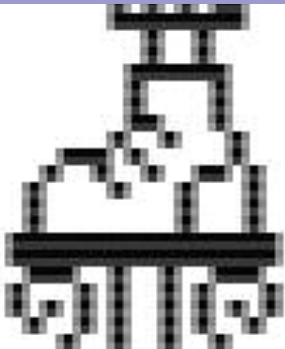
Two months and much press coverage after an ambitious seller first listed this "INCREDIBLY rare Michael Jackson computer game for the Sinclair Spectrum" s/he finally got rid of it. Not at the £199 starting price of the first attempt (see last issue), not at the £140 starting price of the second attempt, not even at the £99 starting price of the third attempt. Nope. In the end it went for £15 to an 'anonymous' buyer. Right.



SPECTRUM 48K MANIC MINER CHEAT unlimited lives

Buy It Now: 99p
Ended: 30-Apr-05

That's right folks: 99p will buy you one whole infinite lives poke, rushed to you by express email delivery from this philanthropist ebayer. Yes really. Just search ebay on 8186755709 to see. Thanks to Steven Holland for the link.





THE FOREST STOP

The Forest Stop is a 128K adventure game I wrote in the late 80s using PAW. Which never got published. When I set up my first Speccy website (see p54) a page of it was dedicated to TFS and a snapshot available to download. One problem I had, however, was that I couldn't recall its solution. I asked visitors to have a go at finding out, but no submissions came...

More recently Douglas Harter (see p38) set up a new contest for me in monthly IF magazine Adventure Probe and the solution has been worked on by noneother than the editor of this publication, Barbara Gibbs. Barbara has produced a stunning piece of work, which stirred memories aplenty as I followed it. Unfortunately she also seems to have uncovered a bug which messes about with the ending, so I've got a little compensatory coding to do this summer before I put the game back on my website. Oh well...

In the meantime a big thankyou to Barbara - her almost-complete solution is below - who'll be receiving a signed copy of BLINK for her troubles.

X ME (personal details of your character - note occupation), I (an ID card, a slip of notepaper, a car key), READ NOTEPAPER (a list of questions to ask the hotel guests and staff), NE (reception), RING BELL (to attraction receptionist's attention), SHOW ID CARD (now have large brass key to room 12), U (first floor landing), SW (need brass key). Now in your hotel room, no luggage but see a letter. TAKE LETTER, READ LETTER, DROP ALL, TAKE BRASS KEY, N, SAY PORTER "WHERE LUGGAGE", D (hallway), NE, RING BELL, SAY RECEPTIONIST "WHERE LUGGAGE", RING BELL, SAY RECEPTIONIST "WHEN DINNER" (told eight o'clock), S, X CLOCK.

N, E, N (lounge), TURN ON TV (news report about sightings of UFOs in the area), S, W, OPEN DOORS, N, N, E (shed), TAKE ROPE. When the gardener appears X GARDENER (note what he is carrying). He wanders around three locations, here, by the gate, and the patio. When he drops the calculator and small key, pick them up. Return to the hallway. U, N (into room 14 - see a lady), SAY LADY "I AM A JOURNALIST", SAY LADY "DID UFOS LAND", SAY LADY "HOW MANY WERE THERE", SAY LADY "WHAT DID THEY LOOK LIKE", S.

When the business man appears GIVE CALCULATOR TO BUSINESS MAN (he gives you a tenner). When the middle-aged man appears SAY MAN "DID UFOS LAND" (he gives you a torn map), SAY MAN "HOW MANY WERE THERE", SAY MAN "WHAT DID THEY LOOK LIKE". Return to the hallway, X CLOCK (should be just after eight o'clock and everyone should be at dinner).

N (dining room), SIT DOWN, if necesasary WAIT (until waiter appears and starts babbling about UFOs), HIT WAITER (he calms down and gives you a crucifix to give to the barmaid/bargirl), WAIT (until he brings your soup), EAT SOUP, GET U, E, N (lounge -

bargirl usually here), GIVE CRUCIFIX TO BARGIRL (she takes you to the beer room, but you are discovered by the barman), KISS BARGIRL (barman is satisfied and leaves, the bargirl gives you her diary of events and suggests you look for the teleport, maybe Jim the gardener can help). Now back in bar. LOOK (until barman appears), BUY BEER.

N (lounge), TURN TV OFF, READ DIARY (note details), S, W, S, U, N (room 14), SEARCH ROOM (find an album of photographs), X PHOTOS, S, D, N, N, N, E (garden shed). When the gardener appears GIVE TENNER TO GARDENER, SAY GARDENER "WHERE IS TELEPORT" (he says it is in the attic), GIVE PHOTOS TO GARDENER, TAKE UNLIT TORCH FROM GARDENER, TAKE ROPE.

Go to patio if not already there. X WALL (covered in ivy), U, U, W (outside room 23), SMASH WINDOW (now in room 23 - see a rubber-suited body), X BODY, SEARCH BODY (now have a slip of paper and a laser weapon), READ SLIP PAPER (ticked staff are the ones taken over by the aliens), X LASER, Should now hear footsteps. HIDE UNDER BED, WAIT, WAIT (porter goes into the bathroom), S (to exit the room), X CEILING (see a trapdoor), OPEN TRAPDOOR (too high).

D, SW, DROP DIARY, GO TO BED, I (should have brass key, rope, unlit torch, laser weapon, small key, torn map), N, D, (hallway), X CLOCK (just after 10 o'clock), N, UNLOCK DOORS, OPEN DOORS, N, CLOSE DOORS, N (by gate), OPEN GATE, N (road), READ TORN MAP, DROP TORN MAP, N (forest), N, N, N, N, N, N, N, N, N, E, E, E, E, E, E (clearing - see house to the north), N, N (by door), OPEN DOOR, N (challenged by another rubber-suited figure), FIRE LASER (that's got rid of it).

N, U, DROP ALL, TAKE ROPE, TIE ROPE TO DOOR, TAKE TORCH, U (fall through hole in stairs), TURN TORCH ON, TAKE CAN OF PARAFFIN, CLIMB ROPE, DROP ROPE, TURN TORCH OFF, TAKE SMALL KEY, TAKE LASER, TAKE BRASS KEY, N, E (small living room), TAKE BLACK BOX, X BLACK BOX, W, S, S (clearing), S, S, S, W, W, W, W, W, S, S, S, S, S, S, S, S, S (back at road), S, S, S (back on patio), UNLOCK DOORS (if necessary, need small key), OPEN DOORS, S, CLOSE DOORS, S, X CLOCK (should be around 11.30 when the night porter arrives).

WAIT (until night porter arrives at 11.30), X NIGHT PORTER (note he is carrying a thermos flask), N, E, CLIMB OVER BAR, S (beer room),

Hi Colin,

It's Simon N Goodwin, ex Crash, SU, both YSes etc.

I've got around to downloading and reading issues 8 and 9 of ZXF and enjoyed reading them. I was flattered to find myself in the wordsquare and have found 30 words, though I'm not sure if they were all intended - e.g. perhaps ZX was present by chance. Also Graeme Kidd's name seems to have been truncated(d :-).

This mail is a collection of comments, which I hope you will take in the context that I'm very glad ZXF exists, and remember a lot about the Sinclair heyday and therefore am likely to be critical as well as informative and (I hope, still) interesting.

As regards the note about Fuse 0.7.0 on page 20 of ZXF8, I'm puzzled when you say that 'I don't have a system capable of running it' because clearly you have generic X86 hardware and everything you need to run FUSE is freely downloadable in the form of numerous Linux and BSD distributions. The greatest weakness of ZXF is its ignorance of non-Windows systems (other than Spectrums, of course) so I volunteer to set up a Linux system on any machine or removable drive you have spare, if you wish, by arrangement, to put this right, and put some ZX emulators on it for good measure.

My reviews of ZX emulators for Linux Format magazine are at:

<http://simon.mooli.org.uk/LXF/Spectra/Spectra.html>

I might update them but it's not yet a high priority. Back then Fuse was at version 0.3 and an also-ran - I suspect the Windows version you tried was of that vintage.

There are reviews of many Amiga ZX emulators here:

<http://simon.mooli.org.uk/AF/7.html>

Again there's been significant progress since (most notably the port of X128, and ASP and CBSpeccy, both on Aminet) and I may update the pages to note this, but haven't scheduled time to do that yet. I did write a bit about those in other magazine articles after the AF series finished.

I've written quite a few reviews of ZX emulators for Qdos too, most recently in the final issue of Your Sinclair (the final news-stand edition, I should say). You might have spotted me a few times in Retro Gamer; I gave a long talk about Sinclair spinoffs (ZX and QL clones), most of which Tarquin Mills now has on DVD, at ORSAM 2004.

Your readers might like to know that I've put all the articles and many of the graphics from the Sam Supplement disc-zine online:

<http://simon.mooli.org.uk/snarf/SUPPLEMENT/>

All the reviews, program notes, editorials, letters and lists of the files on the 60 disks (freely downloadable as +D/Disciple style 800K disk images elsewhere) have been converted to HTML from the original SAMScratch format, along with scores of SCREEN\$ files now in PNG format linked to the HTML. The conversion was done in Sinclair SuperBASIC running on UQLX (a Unix Qdos emulator) as that made it trivially easy to open the disk images and read the directories and documents therein and convert the contents to hyper-linked HTML). This was done with permission of Dave Tonks, Supplement editor, and a CD with all the contents plus disk images, emulators and tools for various systems is available from me.

Sam Supplement was a thriving user-group of active SAM BASIC programmers and the disks provide a vast resource of sample code

and tips for anyone who has a SAM or one of the SAM emulators and is keen to continue home computing in this exceptionally productive 'Super-Sinclair' environment.

A retro remake of my DkTronics hit Gold Mine is now underway, based on the later SAM version but with options to revert to the 16K (DkTronics) or 48K (SU covertape) version, and optionally new 16 or 24 bit graphics and sound. I'll let you know when there's something to show of this - I'm helping an enthusiast convert the SAM version to VB at the moment.

Incidentally the 30M of 'stock' at Sinclair was not properly explained in the ZXF8 history of 1985. It has since become known (I first heard it after the Amstrad takeover, from an ex-Sinclair employee) that most of that 30M figure was derived from accounting for all the untested product returns (almost all of them 48K Spectrums, often in full working order sent back by catalogue firms who asked no questions) which Sinclair had warehoused pending a retesting process that wasn't even started till after Sinclair sold out - at their full price, delivered from Timex, of £30 each. The 25% return rate that led to Clive's spat with Chris Curry, on production of approaching four million machines, accounts for almost all the 'stock'. There were some QLs and 128s in that pile, but only a few thousand of each. Most of the rest were returned by consumers who couldn't cope with cassette loading. Quite a few were returned after the 12 month warranty expired. Sinclair's policy was to send out a fresh one from current production without question when a machine was sent back by a customer, and pile up the putative duds till it was worthwhile sifting through them to





This is loooong overdue, I'm sure you'll agree. What with all these new Spectrum games being released over the last few years our pointy sticks have been just crying out for a new bunch of hints, tips and pokes to be shaken at. So get... erm... shaking...

Flash Beer

Here's some **Tipshop** pokes for the Boulderdash clone by Weird Science Software. Provided by Martin Ball

Part 1

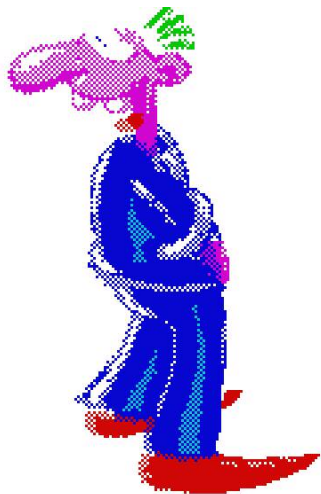
Infinite Lives: 32860,0
Immunity: 35201,201

Part 2

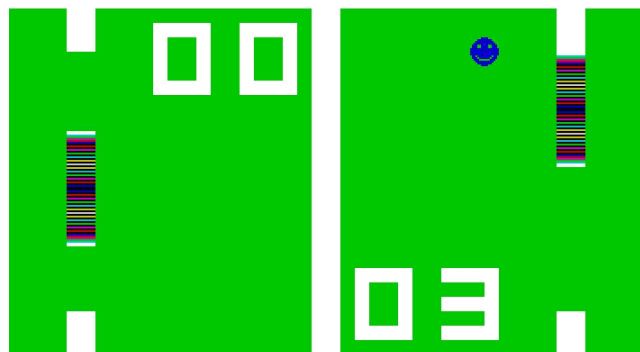
Infinite Lives: 32860,0
Immunity: 35310,201

Part 3

No of Lives: 49591,x
Immunity: 35516,201



TV-GAME



Blown away by TV-GAME's amazing border graphics? Hidden away in the game is code that pushes the barriers back even further: press **SYMB SHIFT + CAPS SHIFT + V** at the main menu and you too can get amazing extra multi-colour bats just like those shown above.

WILLY POKING

Finding Dr Andrew Broad's Miner Willy games just a tad on the difficult side? No? You sir are not human. Luckily for us Dr Broad does at least appear to be in possession of some humanity, for he's included an infinite lives poke for his games.

Manic Miner: Neighbours and **Ma Jollie** both use POKE 35136,0; **Party Willy**, on the other hand, uses POKE 35899,0

CAULDWELL CORNER

Jonathan Cauldwell himself has sent us in the following:

Rough Justice

To skip a difficult screen pause the game, then hold down the SYMBOL SHIFT key and press 5.

Egghead 3

To teleport around the underground complex hold down SYMBOL SHIFT and press X. Where you end up depends which room you teleported from, but most of the time you will be taken straight to the room containing Egghead's Spectrum games. Collect the disc, then press SYMB SHIFT and X again, and you will be teleported back to the start. This makes the game far easier to complete.

Higgledy Piggledy

For invulnerability enter "OINK" as your name for the high score table. (Actually, entering "ZX" has the same effect!) There's also a hidden game but I'm saying no more!



In response to last issue's article on storage solutions (originally printed in **Micro-Mart**), Simon Goodwin has not only sent us his original article for **CRASH** issue 44 (September 1987) describing the Swift Disk system, he's also provided us with some new pictures of his own kit to look at.

The Swift Disk system was developed last year [1986] for a large company which eventually lost interest in the Spectrum. The inventors - a group of 'big computer' designers - decided to press on, and sell the system themselves. This is its first ever review.

The Swift Disk began as an easy-to-use combination of a standard disk interface and a 'press-button' copier like a MULTIFACE. Since then it has grown in power, but the original core remains.

The interface is a black box with connectors for a Kempston joystick, serial printer and up to four standard disk drives. You use your Spectrum or 128 as normal, with the interface connected.

The fun starts when you press the button on the back. Whatever program you were running is suspended and the disk system

says hello. You can then use any of the SWIFT DOS commands. For instance:

SAVE 0;FRED 7

will save the entire contents of memory on disk zero, under the name FRED. Unlike a Multiface file, the data is not compressed, but you can still get 13 48K images, or four 128K ones, on a single disk.

The '7' is the screen border colour to be set when the program is re-loaded. If you type an 'S' after the file name, only the screen is saved. 128 users can choose between its two possible screens. You can save the contents of any memory area similarly.

LOAD fetches programs, screens or code from disk. QUIT lets you re-start the loaded program, with its display intact. '*' resets the computer. ERASE deletes disk files, unless you have used KEEP to protect them against accidental

erasure.

You only need to type the first character of a DOS command. If you miss out parameters - e.g. you just type 'L' - the system will ask you questions to obtain any other information it needs.

ALTER lets you edit program memory. Thus you can use all the POKes published in **CRASH** Playing Tips, without resorting to loading tricks or a MULTIFACE.

FORMAT makes a new disk ready for use. It takes about two minutes to set up a 640K disk. When you format a disk you must specify the maximum number of files it can hold; the default is 32; larger numbers slow things down and gobble up some file-space.

CATALOGUE comes in two variations: the BRIEF form tells you the name of each disk file, the date it was created, the size in 256 character 'sectors', and the file



The Swift disc interface used the same plastic moulding as Interface 1, and it can even be plugged in and used at the same time as Sinclair's microdrives, network and serial port.

But Swift puts the Shugart-format floppy drive connector in the space Sinclair reserved for the net ports, adds a Kempston-compatible autofire joystick port where Interface 1 had the serial port, and moves its own serial connector to the space Sinclair used for microdrive connections, on a similar obscure IDC connector. The vital snapshot 'magic button' was added at the rear end, by the through-port.



DOCTUM

Author: **Carlos Gandarillas, Antonio Ballesteros** Price: **Free** Reviewer: **James Zeun**
Download: www.worldofspectrum.org

When I was first offered to review this game, I was slightly suspicious. Not because it was an adventure game, which requires skill. Something I lack when it comes to these games. But because it was all in Spanish. Erm, I don't speak speak Spanish 'ED

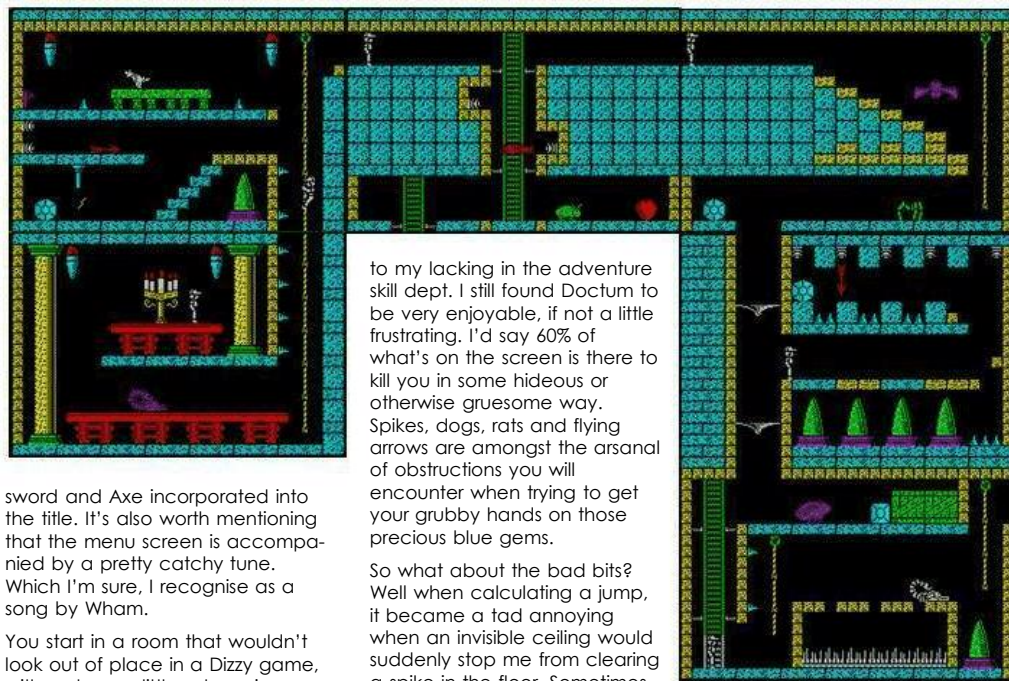
From the first look of the menu, I was intrigued. I half expected this game to be about barbarians or at least something along the lines of Golden Axe. What with the

realising I could not only kick things, but if I pressed down I could press the action key and fire my gun. (Poor Dizzy, he could have use one of these??)

So from the onset it looks like Doctum is an adventure game, similar to say "Tomb Raider". You run around collecting Blue gems and if you're in a serious pickle you can also find the odd heart to give you another life. While I wasn't able to get very far, due

you haven't. Which if like me you discover after reaching three screens past the beginning. It can re-ignite primordial rages not seen since the days of the cave man and pointy sticks.

If you put the object detection to one side, I think Doctum is a pretty good game. I think it stands up well against other published works. I'd certainly like to see it put on to tape. It would compliment anyone's game collection.



to my lacking in the adventure skill dept. I still found Doctum to be very enjoyable, if not a little frustrating. I'd say 60% of what's on the screen is there to kill you in some hideous or otherwise gruesome way. Spikes, dogs, rats and flying arrows are amongst the arsenal of obstructions you will encounter when trying to get your grubby hands on those precious blue gems.

So what about the bad bits? Well when calculating a jump, it became a tad annoying when an invisible ceiling would suddenly stop me from clearing a spike in the floor. Sometimes when you are standing beneath a lantern and you think you have cleared it just enough to jump, in actual fact

sword and Axe incorporated into the title. It's also worth mentioning that the menu screen is accompanied by a pretty catchy tune. Which I'm sure, I recognise as a song by Wham.

You start in a room that wouldn't look out of place in a Dizzy game, with a strange little rat running around on the level below you. Now at first I didn't know exactly what was going on, so I died on several occasions. This was before

Map:
www.iespana.es/carlogical

SWIFT BASIC COMMANDS

```
CAT %( stream,)drive (:B/F)
CLOSE % stream
ERASE %drive;"filename"
FORMAT %drive;"diskname" (,maxfilecount)
FORMAT % stream;"T"/"B",baudrate,linelength
IN % stream,variable,recordnum
INKEY$ stream
INPUT stream;<variables>
LOAD %drive;"filename" (,LINE/DATA/CODE/SCREEN$)
MERGE %drive;"filename"
OPEN % stream;drive;"filename","R"/"W"/"A", "T"/"R",len
OUT % stream,variable,recordnum
PRINT stream;<values>
SAVE %(drive;)"filename" (,LINE/DATA/CODE/SCREEN$)
```

Items in brackets are optional. "/" separates alternatives.

feature of version 3. This lets you run commercial microdrive programs on disk without changes. You don't need Interface 1 or 'real' microdrives, although an Interface 1 manual is useful if you want to develop new microdrive programs - Swift don't document the Sinclair drive commands.

The microdrive emulator is easy to use. It takes about four seconds to load a file called EMUL, which stores a close imitation of Sinclair's microdrive system in the disk interface RAM. Swift DOS and Swift BASIC are disabled and replaced with microdrive commands just like those provided by Interface 1.

The main difference - besides a massive increase in reliability - is

that FORMAT grabs an area of disk space and uses it to imitate a microdrive, rather than set up a real cartridge. The disk area appears as one 128K file from Swift DOS, but when the emulator is loaded CAT shows you up to 50 files 'inside' that area. Four 'pseudo-cartridges' fit on one disk, and you can use them all at once if you like.

The competing Disciple disk system makes a brave attempt at microdrive emulation, by recognising microdrive BASIC syntax and the 'hook codes' - microdrive system calls provided by Sinclair. Unfortunately 'real' machine-code programs like Tasword 3 tend to leap directly into interface routines. Only the Swift Disk can cope with

this, by mimicking the Interface 1 code right up to the point at which data is about to be read or written.

I tried out a pre-release version of EMUL with all the microdrive programs I could muster, and it worked remarkably well. I had no trouble creating disk versions of the programs by loading the emulator and following the microdrive transfer instructions.

All the programs loaded and saved disk data files without trouble. Besides Tasword I tried Cheetah's Sound Sampler, Powerprint 2, Beta BASIC, Hisoft Pascal 1.6M, Oasis's Laser Genius, MIRA Pascal (a new compiler, reviewed next month), Discovery/Gremlin's Code Machine 3.1 and its parent, Pictureque's EDITAS 2.1. CAT options, multi-file assembly and other tricky operations worked fine.

The only things that went wrong were file ERASE operations from Tasword and the Sound Sampler. Both programs ignored the command. Swift say they've since moved a misplaced instruction in the emulator, and ERASE now works even if the microdrive ROM is called directly.

The microdrive emulator is a powerful incentive to buy a Swift disk, if you already use microdrive software - or would like to but can't stand the cartridges.

At the moment EMUL runs at about the same speed as a real





HIGGLEDY PIGGLEDY

Author: **Jonathan Cauldwell**; published by **Cronosoft** Price: **£2.99** Reviewer: **Colin Woodcock/James Zeun**
 Website: **www.cronosoft.co.uk**

Another year; another **Cronosoft** release; another game by **Jonathan Cauldwell**. The first that the denizens of **WoS Forums** knew of this upcoming release was Cronosoft's **Simon Ulyatt** asking for entries in an inlay designing competition. A very strange thread followed, but Simon got his entries nonetheless and the cover for **Higgledy Piggledy** is one of the best Cronosoft inlays so far.

The game? It's to do with Interplanetary Pig Farmer Eadwig Adlethorpe. Of course it is. Eadwig's pigs - through some sort of odd evolutionary quirk - can fly; this, of course, is not normal porcine behaviour and frankly it makes things rather awkward for Eadwig when it comes to rounding them up for slaughter. He's installed a number of teleporters - like you do - in order to send them off to the pig processing plant, but can he direct those pigs successfully into the teleporter? He can not. And that, of course, is where you come in.

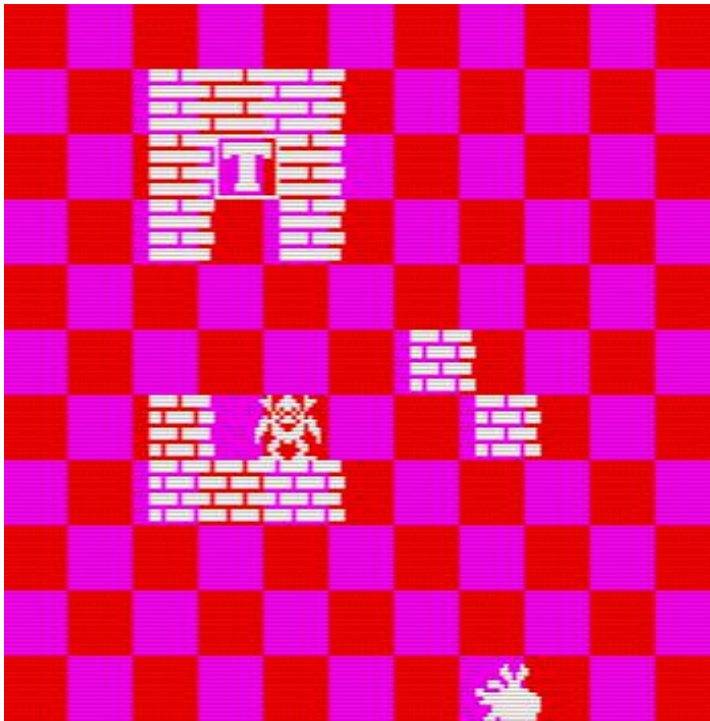
If it was down to me a rifle and a pointer dog would do the trick quite nicely; instead we are given a fiendishly addictive puzzle game where you both move around the playing area and attempt to influence the direction of the pigs by picking up and moving blocks one at a time. The pigs, you see, move along in straight lines until they hit a block, at which point they take a right-angled turn. It's a bit like a combination of Lemmings and that game where you control the light with the mirrors. But more frustrating. Oh yes - and better.

In my opinion Jonathan Cauldwell has already made a permanent name for himself in Spectrum software, simply due to the fact

that it's the twenty-first century and he's the only guy around banging out Spectrum games at the frequency and high quality that he is. All of his games to date have been highly competent, attractive and fun-to-play pieces of work but, with the possible exception of Fun Park, I can't say in all honesty that anything he's done so far stands out as a Spectrum classic in its own right. But Higgledy Piggledy does.

There are a number of simple, but very effective ways in which he achieves this - we're not talking multicolour effects or border graphics here, just striking visuals and simple gameplay. The backgrounds against which Eadwig and pigs move in particular are cleverly

managed patchworks which look like they shouldn't be possible on a Spectrum. Of course you quickly realise that the effect has more to do with good colour placement than it does any tomfoolery with the TV beam, but by then the illusion has done its work and what you're left with is a 'look' that will now always be associated with this specific game. Higgledy Piggledy has that ultra-special quality: it doesn't look like something you've seen before. Add in a wacky series of title screen animations (pigs flying; sausages sizzling; you know the sort of thing) and you have something completely unique. I've applauded Jonathan's work before, but this gets an ovation.



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